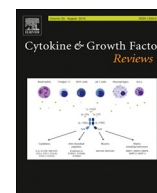




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The Covid-19 pandemic in Denmark: Big lessons from a small country

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ABSTRACT

Denmark, a Scandinavian country of 5.8 million people has weathered the Covid-19 crisis with a relatively low rate of infection and death. Denmark has also become one of the first European countries to partially re-open its society. We offer the perspective that the combination of rapid response from the government, trust and a high level of confidence in government by Danish citizens, and the importance of social heritage contributed to the effective management of the coronavirus crisis.

1. Denmark and Covid-19

Denmark is the southernmost Scandinavian country, a prosperous and thriving nation of 5.8 million people. Denmark is one of the oldest states in Europe, having achieved independence nearly 1000 years ago. Its political system is a constitutional monarchy which combines its history and traditions with all the features of an extremely modern democratic state.

Denmark is a developed, industrialised country where the state and other public authorities exercise considerable regulatory control in the social sphere, providing comprehensive services and benefits to all citizens. By international standards, Denmark has one of the highest standards of living, and the differences between rich and poor are historically smaller than in many of the countries with which it is traditionally compared.

Whereas most other European countries are still under intensive lockdown as of May 1 2020 due to the Covid-19 crisis, Denmark slowly started re-opening its society and industry two weeks ago in mid-April. This observation raises some interesting questions about the handling of the crisis by the politicians and citizens: what are the geographical, demographical and societal factors that explain why and how Denmark and other Scandinavian countries such as Norway or Finland seem to have handled this coronavirus crisis better than other countries? How did other similar sized countries, also located in Europe and with comparable levels of wealth and resources, end up with starkly different Covid-19 outcomes?

As of May 1 2020, while the entire world is being hard hit by a novel emerging coronavirus, Denmark had a total of 9311 cases and 460 deaths, whereas other countries such as Switzerland, roughly similar in size and population and only 1000 km distance from Denmark, have

already accumulated three times more cases and deaths. Denmark's approach to dealing with the coronavirus pandemic could be best summarized by saying "Act fast and act with force". However, the fast response of the government and the rapid handling of the crisis is not the only element explaining the success of this small kingdom in dealing with the pandemic. Indeed, other factors also contributed to the low rate of confirmed cases and deaths throughout the country. In the next section, we discuss some of these factors from the perspective of the expatriate author, an Associate Professor in the Department of Biomedicine, Aarhus University who relocated to Denmark in 2016 and is currently involved in Covid-19 research.

2. Can geographical, demographical, and governmental factors explain the Danish success in fighting Covid-19?

Geographically, Denmark consists of a peninsula of 1,419 islands, of which 78 are inhabited. As a consequence, Denmark has a long coastline of around 7,300 km, but only one 68-kilometre land border with Germany, thus naturally orienting the country towards the south, both economically and politically. Its geographic positioning as a peninsula, sharing only one short border with Germany, a large European country that has also dealt well with the crisis, as well as the rapid lockdown by the Danish government, are certainly critical points that contributed to limiting the viral spread. By comparison, Switzerland shares borders with five countries - France to the west, Germany to the north, Austria and Liechtenstein to the east and Italy to the south - and amongst these countries, France and Italy have been particularly hard hit by the pandemic. It is notable however that the vast majority of Covid-19 cases were effectively imported by Danish ski tourists returning from Northern Italy and Austria mainly; only a few cases came from

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foreigners crossing international borders, thus questioning the precise impact of closing of the borders.

Demographically, the 5.8 million people of Denmark are spread throughout 42.9 km² and the population density is relatively low with 137 people per km². The population is not especially young with a median age of 41.6 years. By comparison, Switzerland has 8.5 million of citizens with a median age of 42.2 years, distributed over roughly the same surface as Denmark (41.1 km²), with a slightly increased population density of 219 per km². If the low population density, compared to larger countries in Europe such as France, Spain or Italy, can partially explain the low numbers of Covid-19 cases and deaths, it certainly cannot explain everything, because Switzerland shares roughly the same demographic numbers, yet has three times more individuals affected by the epidemic. One could then wonder, what are the other factors that impacted the control of the pandemic spread in Denmark?

As mentioned earlier, the Danish government was among the first countries in Europe to act and act firmly against the virus by declaring a national lockdown and closing its borders. The country's approach was more drastic and differed greatly from its neighbour and "old enemy" – Sweden, where relatively few measures, except 'social distancing' were imposed on public life. Denmark banned large public gatherings, closed down all unnecessary venues across its cities, heavily discouraged the use of public transportation and all manner of travel unless absolutely essential. Daycares, schools and universities were very quickly shut down and air travel was severely restricted – and while these restrictions have become the 'new normal' across the continent, Denmark was among the first countries to impose such restrictions.

Moreover, the Danish health care system is very equitable and free for everyone, independent of health insurance, and with a tradition of a large public sector of high quality hospitals and clinics, with relatively few private clinics. This aspect was also a contributing factor to the impressive pace and flexibility with which the entire health care system was able to prioritize and reorganize medical departments, isolation wards, and hospital beds, as well as doctors and nurses, to be optimally prepared to isolate and treat admitted patients.

3. What role did – Trust and Danish culture – play in the fight against this newly emerging coronavirus?

A critical factor in understanding how it was possible for Denmark to cope with the current coronavirus crisis may rest precisely with the presence of trust and other societal factors. Indeed, Denmark is a country where trust regulates everything. It is striking that Danish citizens do not see a host of conspiracy theories or widespread panic surrounding the handling of the coronavirus crisis. Additionally, Danes trust their government and politicians! As a French citizen, I can legitimately confirm that the same is definitely not true in France...

On Wednesday, March 11, Danish Prime Minister Mette Frederiksen, announced the closure of all schools and universities across the country from Monday, March 16 due to the Covid-19 outbreak. She reinforced the need to respect social distancing and follow strictly all guidelines provided by the government to limit the spread of the virus. Although the action was to come into effect beginning March 16th, Prime Minister Frederiksen asked citizens to start as soon as possible to respect the recommended guidelines of the government. Interestingly, the Danish Queen also made a public appearance, and likewise gently but firmly encouraged the Danes to be rational and patient, and recommended that citizens follow these instructions for the common good. It was striking, as a father of two children of 9 and 4, to see that daycares and schools were emptied the morning after the announcement; four days before the preventive measures went into effect, Danish citizens were already applying them.

By comparison, France announced the closure of schools, universities and all public institutions on March 12th, and President Emmanuel Macron also asked French citizens to respect the preventive measures. However, on the weekend following the French

announcement, people in Paris and everywhere in France, enjoyed their first real sunny weekend of the year with family and friends, without attention to the request of their President a few days before. This dramatic contrast between the rapid response of Danish citizens, immediately following the rules set by their politicians, and the French citizens not paying much attention to what they were asked to do, illustrated what could be called an "Asterix the Gaul" phenomenon – where French citizens and likely citizens from other southern European countries, have a tendency to contest government authority and not strictly follow set rules. This difference illustrates that countries with a high level of trust and a capacity to follow established rules may be better equipped to tackle the coronavirus crisis than those countries with lower levels of adherence. This illustrates that the Danes have a strong sense of social responsibility for their community, possibly a reflection of the trust created by the extensive welfare system in the country.

Danish success in coping with the Covid-19 crisis can also be attributed to their social heritage and traditions. Indeed, as a French citizen, it is easy to compare the important social differences existing between Denmark and other southern European countries like France. Although the Danes are extremely friendly, they respect all year long what is called these days "social distancing" – the most important approach to reduce virus transmission. Indeed, as compared to Italians, French and Spanish, Danish people have few physical contacts. They do give hugs, but only to close family members or friends; they do not shake hands; they do not kiss each other to say hello; and generally speaking, they like to keep a decent social distance on public transportation and in other public places. The opposite is true in the southern European countries where physical interactions are the cement of relationships amongst family, friends and colleagues.

Finally, the last element that partially contributed to the Danish success with the coronavirus crisis relates to "hygge". This Danish concept cannot be translated into one single word – it encompasses a feeling of cozy contentment and well-being through the enjoyment of the simple things in life; it is such an important part of being Danish that it is considered "a defining feature of our cultural identity and an integral part of the national DNA," according to Meik Wiking, the CEO of the Happiness Research Institute in Copenhagen. In his book, Wiking states: "What freedom is to Americans....hygge is to Danes". This last statement illustrates how much Danes enjoy staying at home with their family and benefitting from all the "hyggelige moments" – the simple moments that life has to offer. The downside of this attitude, critics would say, may be a reluctance of the Danes to relinquish this idea of Denmark as a "fairy tale country", an idea that derives directly from the well-known fairy tales of the famous Danish writer Hans Christian Andersen. This aspect may also contribute to a difficulty in entering the global world scene. Nevertheless, the strong sense of responsibility for their small country may have benefitted the Danes during the current coronavirus pandemic. The opposite is not necessarily true for southern European countries where life is spent outside home, mostly with friends, but not necessarily at home with the family. As a consequence, the lockdown for a Dane is a natural continuity of daily life, as opposed to a lockdown for a French or Italian, that may be perceived as a prison sentence!

Overall, it is probably not a single factor, but the sum of different factors, that together have contributed to the effective management of the coronavirus crisis, and also explains why Denmark is the first European country to slowly and gradually re-open its society, at a time when the surrounding countries are still under severe lockdown.



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of primary immunodeficiencies and severe infectious diseases in humans, most notably viral infections in the central nervous system. Through a translational approach combining whole exome sequencing of patient samples with functional studies in molecular immunology and virology, her group aims at delineating the pathogenesis of infectious diseases, including herpes simplex encephalitis, recurrent HSV-2 meningitis, and VZV encephalitis with the ultimate goal to improve diagnosis, prevention, and treatment of these viral infections in the brain.